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**FIG. 1**

**p7.5tk**

**7.5 k promoter**

**Not!**

# Apa!

GGCCAAAATTGAAAACTAGATCTATTATTGCCCATG GGC CCG GCC GCC AAC GGC GGA

Met Gly Pro Ala Ala Asn Gly Gly

## tk coding sequence

**pE/Ltk**

## synthetic E/L promoter

**Not I**

# Apai

GGCCAAAAATTGAATTTATTTTTTTTGGATATATAAGGCGCCGCGCATG GGC CCG GGC GCC ARC GGC GGA

Met Gly Pro Ala Ala Asn Gly Gly

## tk coding sequence





1. p7.5tk

7.5K PROMOTER                      NOTI                      APAI  
 5'- GGCCAAAATTGAAAACCTAGATCTATTATTGACACGGCGCCGCCATGGGCCCCGGCC -3'

2. p7.5/ATG0/tk

7.5K PROMOTER                      NOTI                      BAMHI      SMAI                      PSTI  
 5'- GGCCAAAATTGAAAACCTAGATCTATTATTGACACGGCGCCGGCGGATCCCCGGGCTGCAGGAA

TRANSLATION                      TRANSCRIPTION  
 SALI                      STOP CODONS                      STOP SIGNAL  
 TTCGATATCAAGCTTATCGATACCGTCCGACCTCGAGGGGGGGCCTAACTAAATTTGTTTGT

APAI

GGGCCCCGGCC -3'

FIG. 2



7.5K PROMOTER	NOTI	CODON BAMHI	SMAI	PSTI	START
5'-GGCCAAAATTGAAAACTAGATCTATTATTGCACGGGCGGCCATGGTGGATCCCCCGGCTGCAGGAA					
SALI		TRANSLATION		TRANSCRIPTION	
STOP CODONS		STOP CODONS		STOP SIGNAL	
TTCGATCAAGCTTATCGATACCGTCGACCCTCGAGGGGGGCCCTAACTAAATTGTTTTTGT					
APAI					
GGGCCCCGGCC-3'					

**FIG. 2 (cont.)**

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 Inventors: Maurice ZAUDERER; Tel: 202/371-2600  
 Title: Methods for Selecting Polynucleotides Encoding T Cell  
 Epitopes (as amended)



4. p7.5/ATG2/tk

5'- GGCCAAAATTGAAAACTAGATCTATTATTGACGGCGCGGCCAATGAGTGGATCCCCCGGGCTGCAGGAA

START

7.5K PROMOTER

NOTI

CODON BAMHI SMAI

PSTI

TRANSCRIPTION

TRANSLATION

SALI

STOP CODONS

STOP SIGNAL

TTCGATATCAAGCTTATCGATACCGTTCGACCTCGAGGGGGGGCCTAACTAAATTTGTTTTTGT

APAI

GGGCCCCGGCC -3'

FIG. 2 (cont.)



5. p7.5/ATG3/tk

START

7.5K PROMOTER

NOTI

CODON

BAMHI SMAI

PSTI

5'- GGCCAAAAATTGAAAAAACTAGATCTATTATTGCACGGGGCCGCCATGACGTGGATCCCCGGGGCTGCAGGAA

TRANSLATION TRANSCRIPTION

SALI

STOP CODONS

STOP SIGNAL

TTCGATATCAAGCTTATCGATACCGTCGACCTCGAGGGGGGGCCCTAACTAAATTTGTTTGT

APAI

GGGCCCGGCC -3'

*FIG. 2 (cont.)*

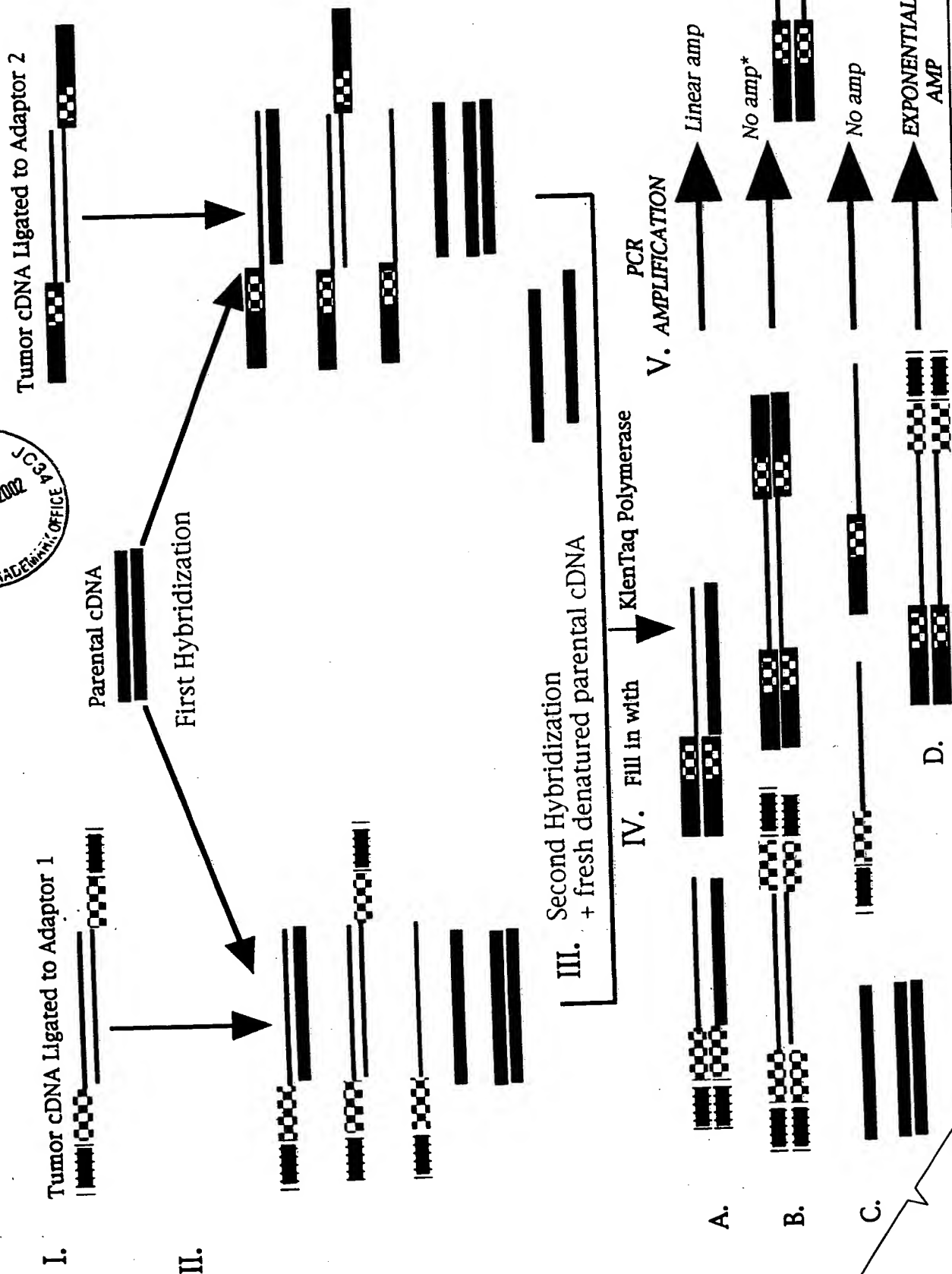
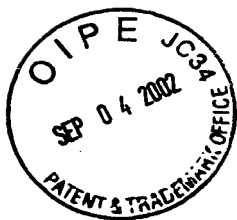
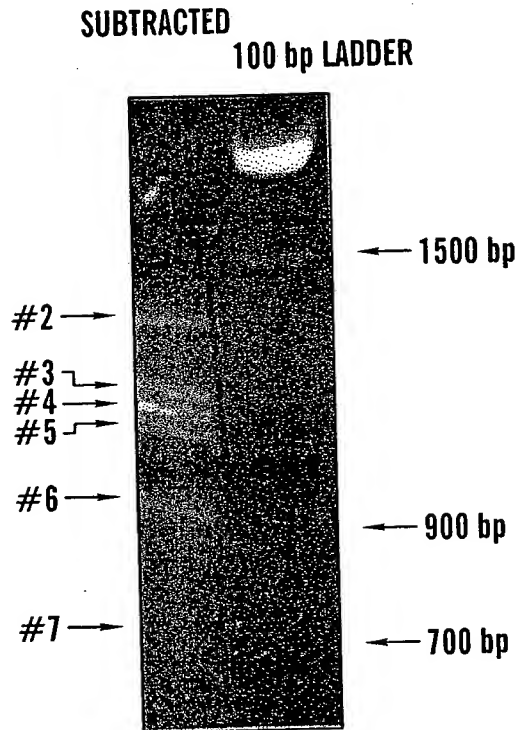
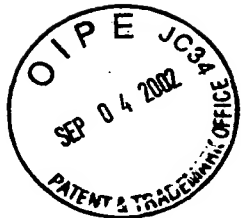


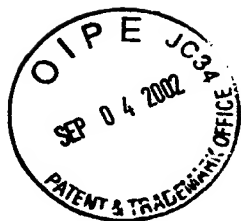
FIG. 3



Appl. No. 08/935,377; Filed: September 22, 1997  
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Inventors: Maurice ZAUDERER; Tel: 202/371-2600  
Title: Methods for Selecting Polynucleotides Encoding T Cell  
Epitopes (as amended)



**FIG. 4**



**G3PDH:**

**TUMOR**

**BCA 39**

**BCA 34**

**BCA 22**

**BCB 13**

**B/cN PARENTAL**

**28S rRNA**

**18S rRNA**

**BCA 39**

**BCA 34**

**BCA 22**

**BCB 13**

**B/cN PARENTAL**

**CLONE #1:**

**TUMOR**

**FIG. 5**



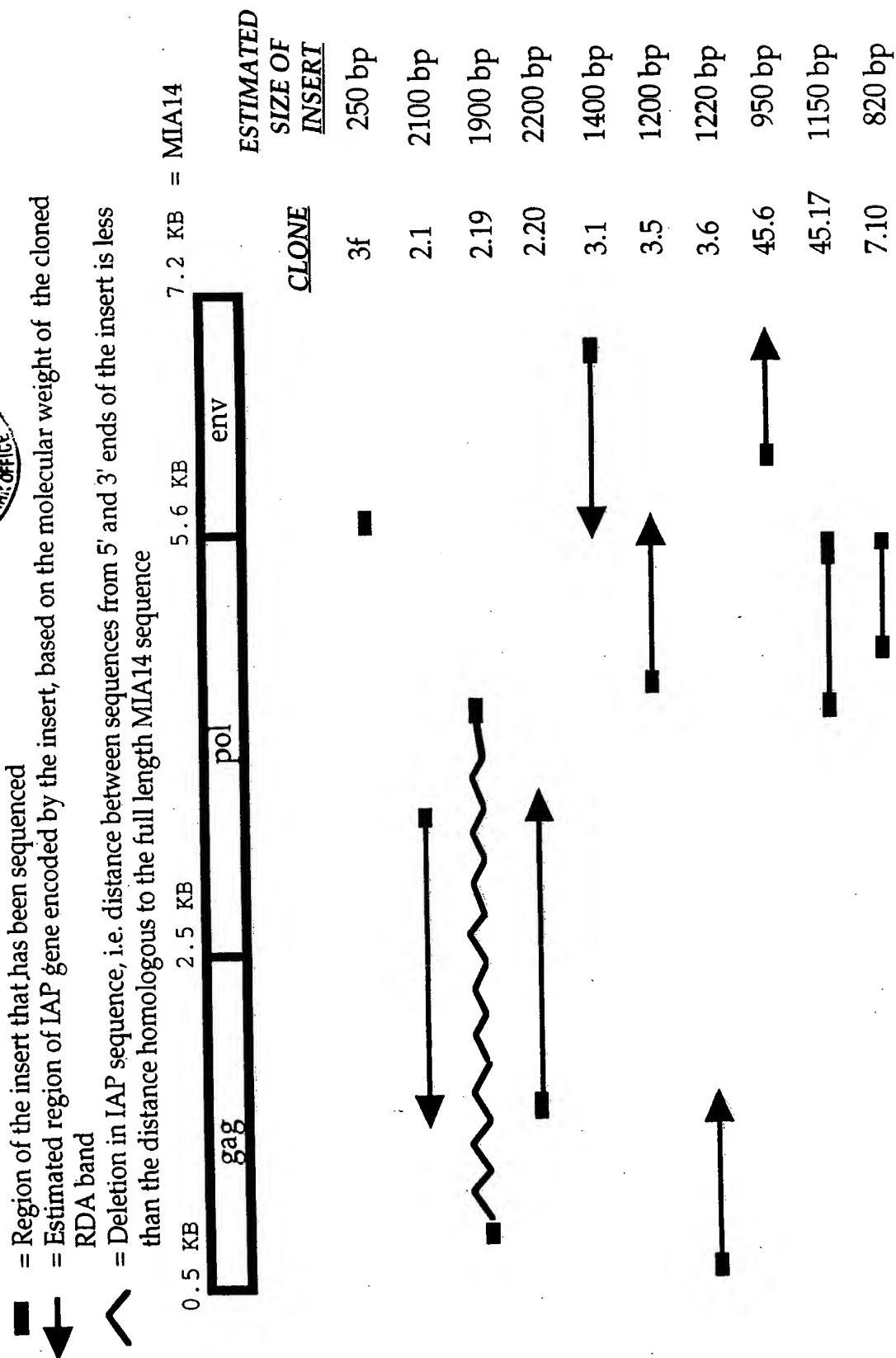
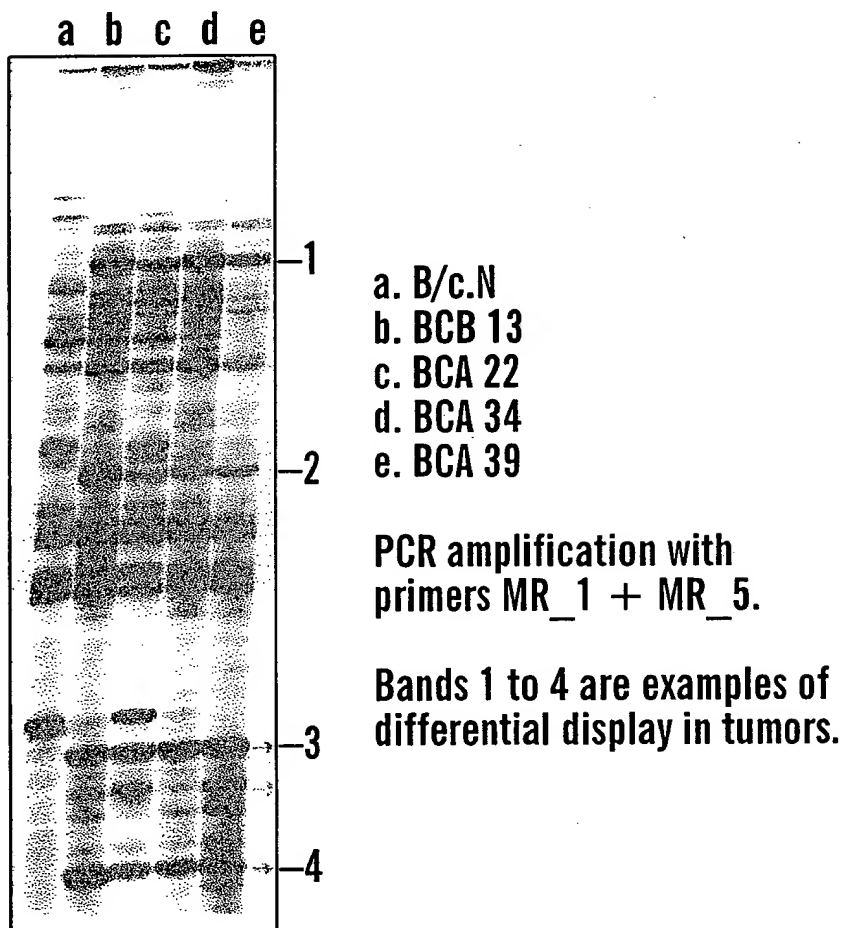
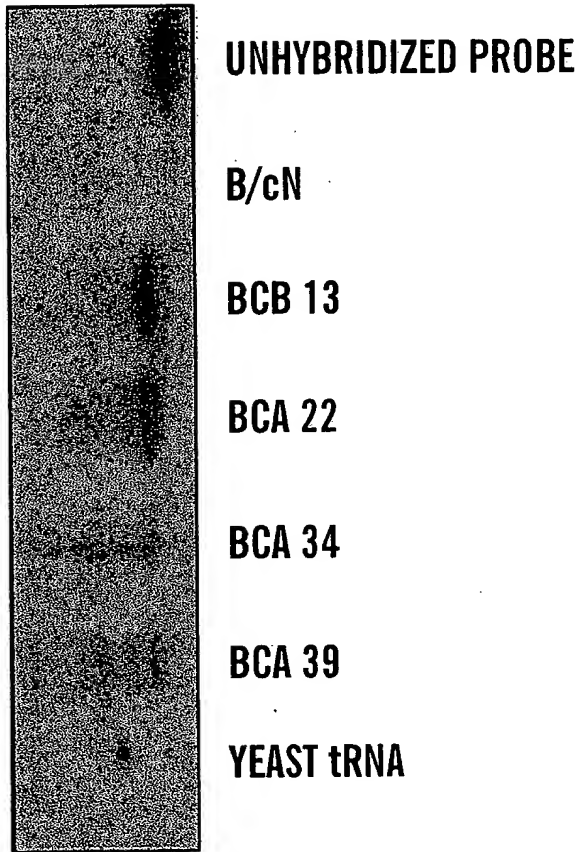


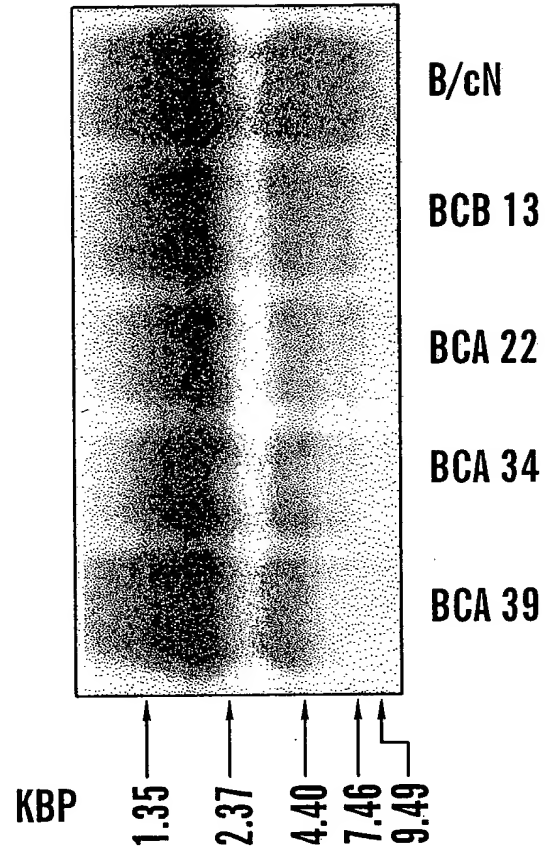
FIG. 6



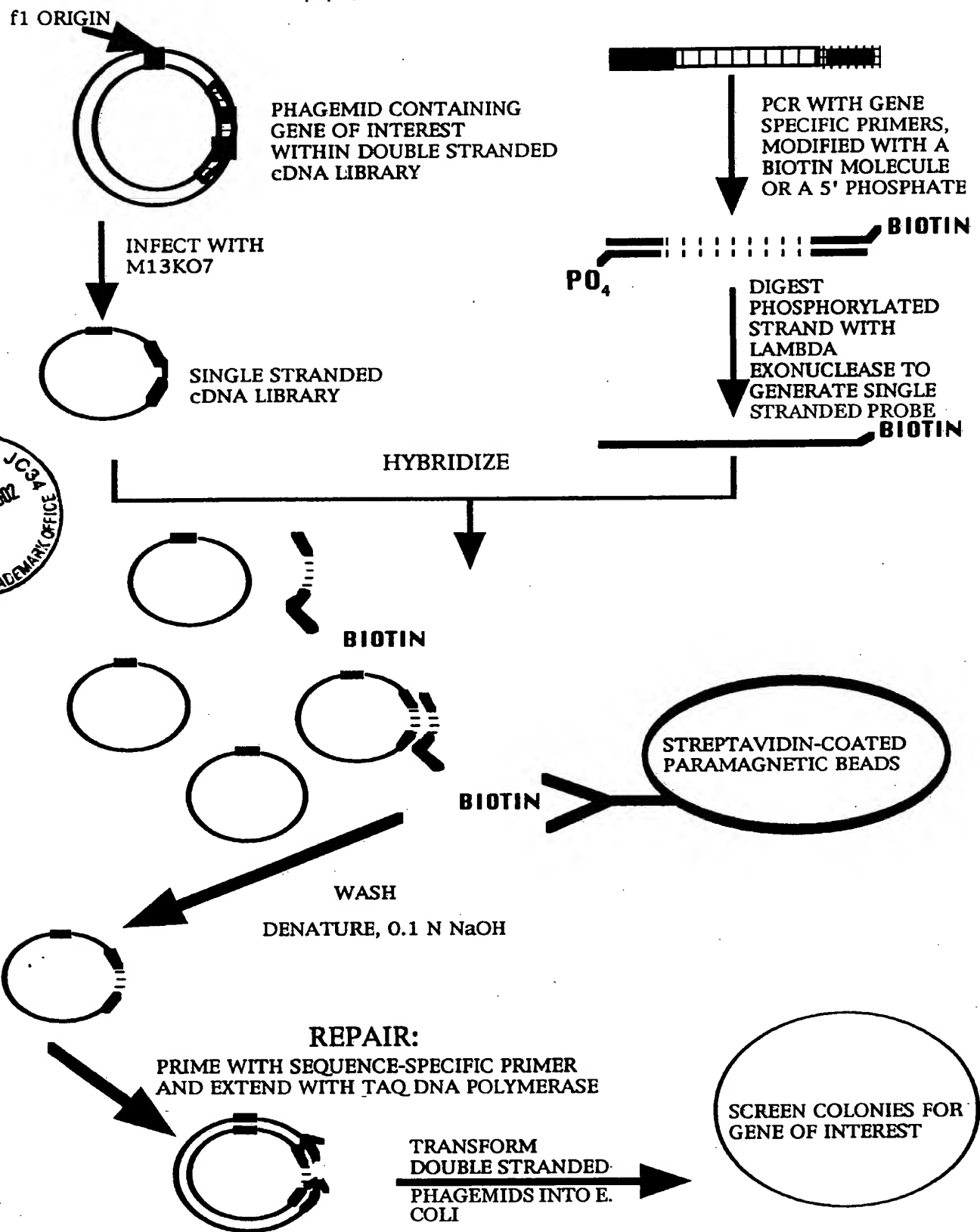
**FIG. 7**



**FIG. 8A**



**FIG. 8B**

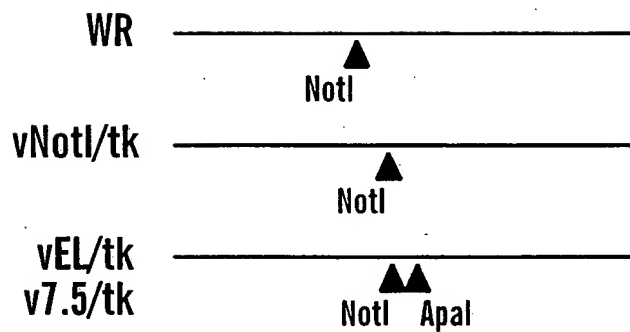
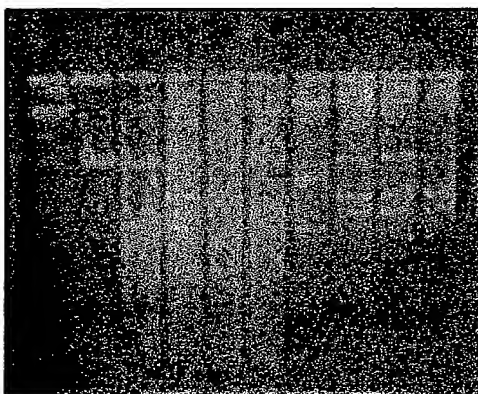
**FIG. 9**

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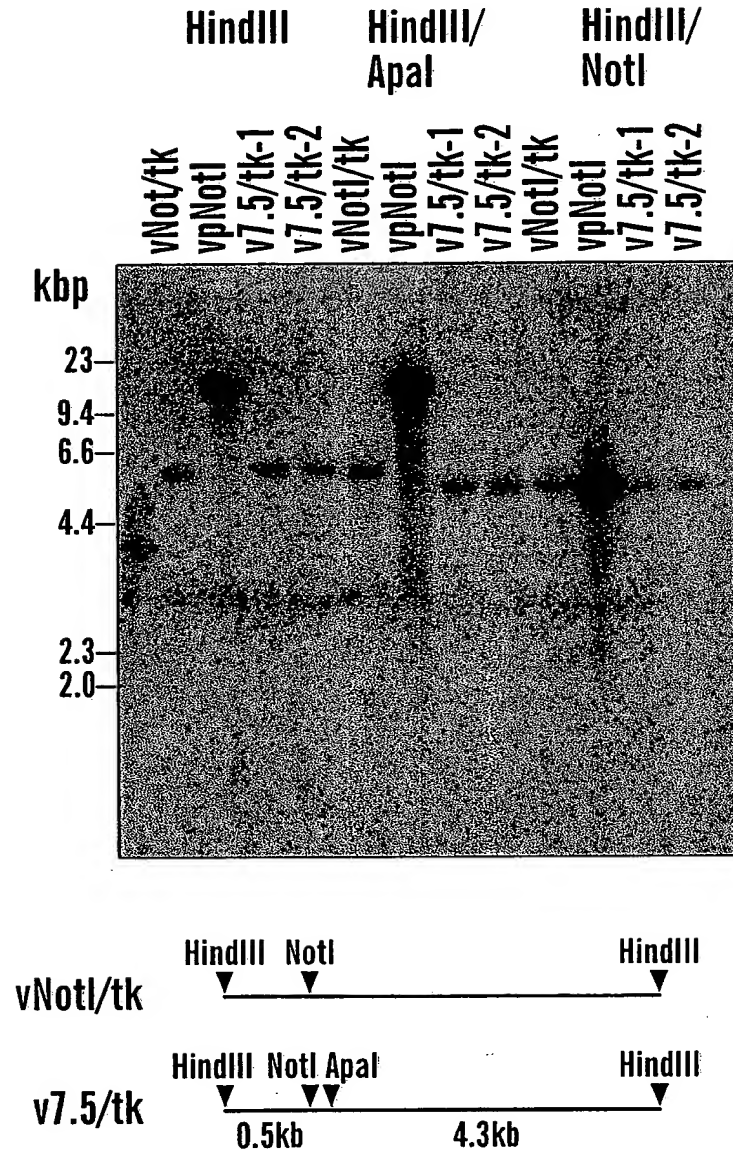


Apal      NotI

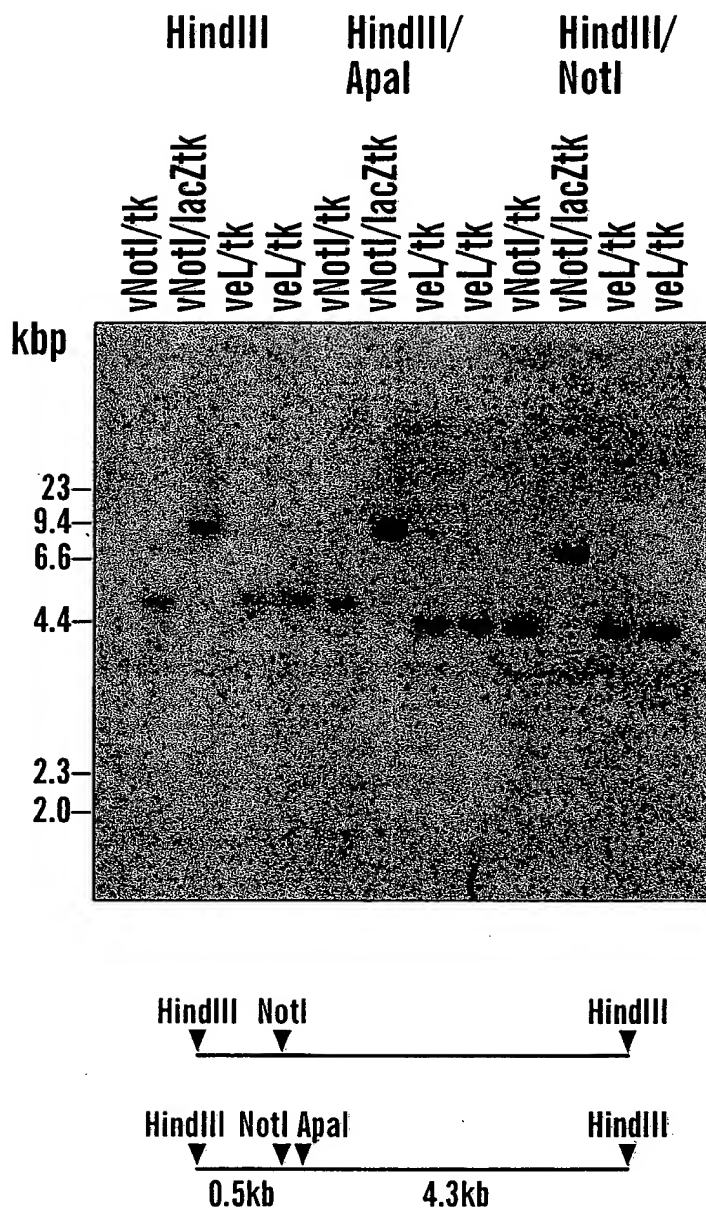
λ   WR   WR   vEL   v7.5   vNotI/tk   WR   vEL   v7.5   vNotI/tk



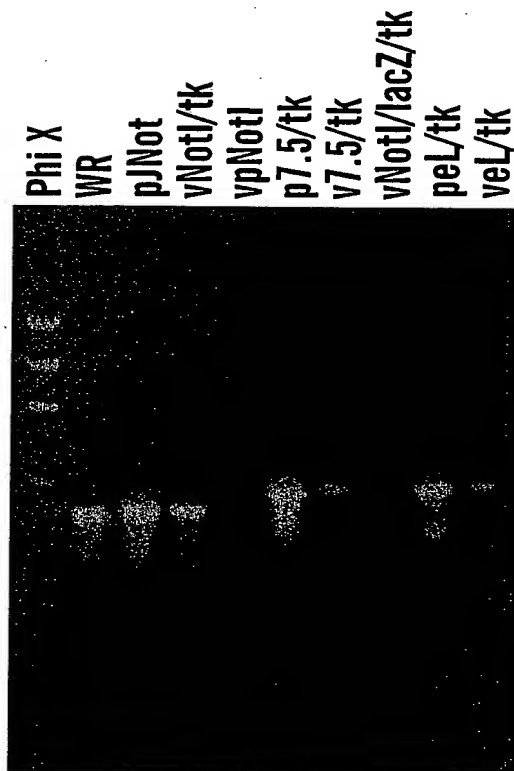
**FIG. 10**



**FIG. 11A**



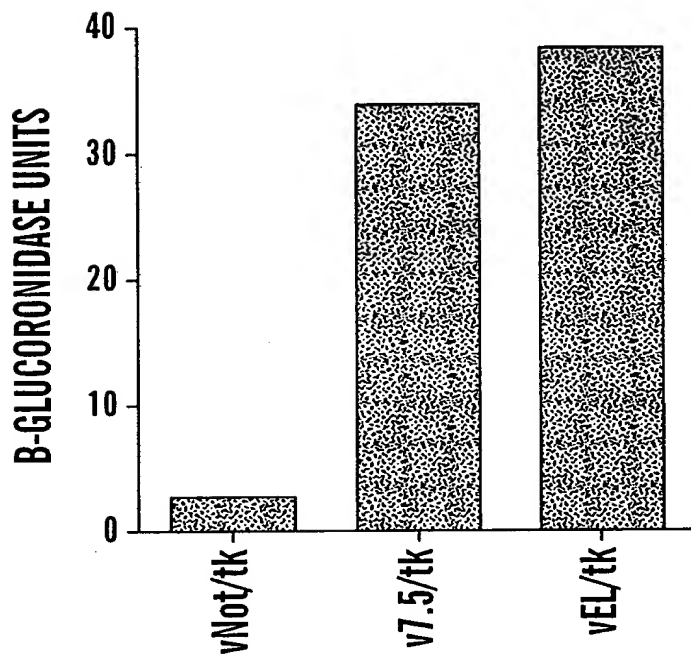
**FIG. 11B**



**FIG. 12**

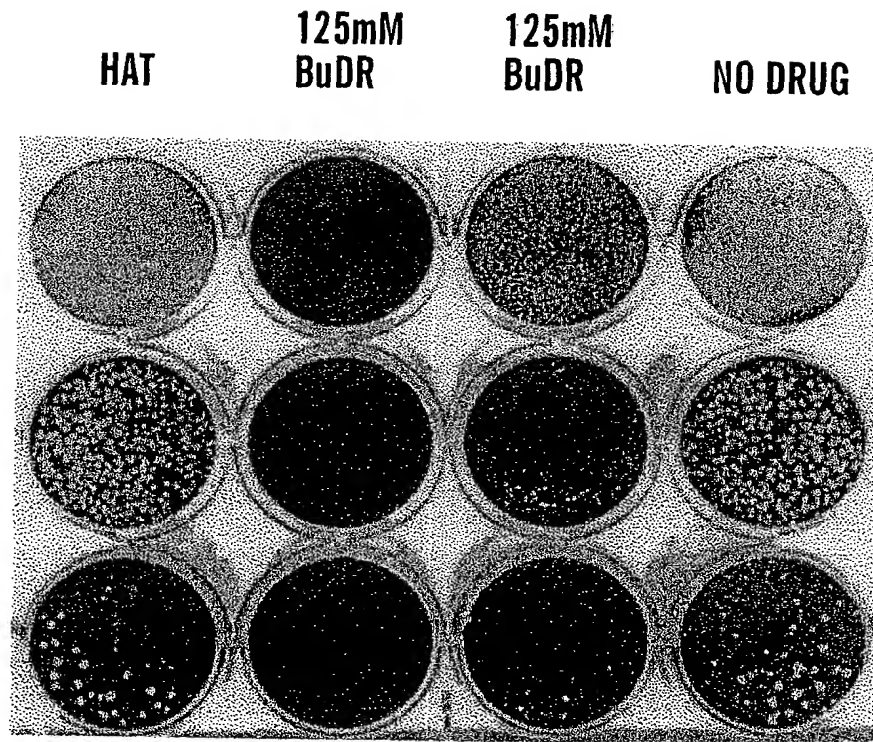


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**FIG. 13**

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**FIG. 14**